Jian Gao

Contact Information

Affiliation	**Kellogg School of Management, Northwestern University**	☎ : +1 (872)-302-9515
	Management & Organizations (MORS) Department	✉ : jian.gao1@northwestern.edu
	Center for Science of Science & Innovation (CSSI)	✉ : gaojian08@hotmail.com
	Northwestern Institute on Complex Systems (NICO)	🖥 : http://www.jianxgao.com
Office	600 Foster Street Suite 130, Evanston, IL 60208, USA	⟳ : 2022/10/01

Research Interests

Summary I am working in the fields of **Computational Social Science** and **Science of Science**, with a focus on studying social and economic systems using data-driven methods. I have published **20+ papers** in peer-reviewed journals including **Science**, **Nature**, **Physics Reports**, **Nature Communications**, *J. R. Soc. Interface*, *Regional Studies*, *Scientific Reports*, and others.

Impact My works have received in total **850+ citations**, with **H-index: 16** (by Google Scholar)

Keywords Computational Social Science, Science of Science, AI for Science, Policy & Science, Complex Networks, Economic Geography, Knowledge Spillovers, Computational Socioeconomics

Academic Positions

Northwestern University (NU)   Evanston, IL, USA

2021/09-Present   Research Assistant Professor, Kellogg School of Management
Center for Science of Science & Innovation (CSSI)

2019/09-2021/08   Postdoctoral Research Fellow, Kellogg School of Management, CSSI & NICO
Mentor: Prof. Dashun Wang

Massachusetts Institute of Technology (MIT)   Cambridge, MA, USA

2016/09-2017/09   Research Assistant, Collective Learning Group, The MIT Media Lab
Mentor: Prof. César A. Hidalgo

Boston University (BU)   Boston, MA, USA

2016/02-2016/04   Visiting Scholar, Department of Physics, Center for Polymer Studies
Mentor: Prof. H. Eugene Stanley

University of Electronic Science and Technology of China   Chengdu, China

2014/09-2019/07   Research Assistant, CompleX Lab & Big Data Research Center

Five Representative Publications

[1] **Jian Gao**, Yian Yin, Kyle R. Myers, Karim R. Lakhani & Dashun Wang. Potentially long-lasting effects of the pandemic on scientists. **Nature Communications**, 2021. (Top 25 Social Sciences and Human Behaviour Articles published in *Nature Communications* 2021)

[2] Yian Yin‡, **Jian Gao**‡, Benjamin F. Jones & Dashun Wang. Coevolution of policy and science during the pandemic. **Science**, 2021. (‡: contributed equally, co-first authorship)

[3] **Jian Gao**, Bogang Jun, Alex S. Pentland, Tao Zhou & César A. Hidalgo. Spillovers across industries and regions in China's regional economic diversification. **Regional Studies**, 2021.

[4] **Jian Gao**, Yi-Cheng Zhang & Tao Zhou. Computational socioeconomics. **Physics Reports**, 2019. (A Review Section of Physics Letters; 5-Year Journal Impact Factor: 32.514)

[5] **Jian Gao** & Tao Zhou. Quantifying China's regional economic complexity. **Physica A: Statistical Mechanics and its Applications**, 2018. (Citations: 120+ times)

Education

2014/09-2019/07	**University of Electronic Science and Technology of China**	Chengdu, China

Ph.D. in *Computer Science*. School of Computer Science and Engineering
Thesis title: Research on the spatial structure and dynamics of socio-economic systems
Advisor: Prof. Tao Zhou

2016/09-2017/09	**Massachusetts Institute of Technology (MIT)**	Cambridge, MA, USA

Visiting graduate student in *Media Arts & Sciences*. The MIT Media Lab
Advisor: Prof. César A. Hidalgo

2012/09-2014/08	**University of Electronic Science and Technology of China**	Chengdu, China

Master student in *Computer Science*. School of Computer Science and Engineering
Advisor: Prof. Tao Zhou

2008/09-2012/07	**University of Electronic Science and Technology of China**	Chengdu, China

B.Sc. in *Information and Computing Science*. School of Mathematical Sciences
GPA: 88.6/100 (3.88/4)

Publications (Full List)

Summary   Published 26 journal articles, 3 conference papers, 3 book chapters, and 4 pre-prints
These works received in total **850+ citations**, with **H-index: 16** (by Google Scholar)

‡ : equal contribution   † : corresponding author   Profiles: 𝒢 R⁶ ⓘD ℙ

Journal Article

[26] **Jian Gao**, Yian Yin, Kyle R. Myers, Karim R. Lakhani & Dashun Wang. Potentially long-lasting effects of the pandemic on scientists. ***Nature Communications***, 12:6188, 2021. (Year 2021 Top 25 Social Sciences and Human Behaviour Articles published in *Nature Communications*; Ranked #3 by accesses).

[25] Luo-Luo Jiang[†], **Jian Gao**[†], Zhi Chen[†], Wen-Jing Li & Jürgen Kurths. Reducing the bystander effect via decreasing group size to solve the collective-risk social dilemma. ***Applied Mathematics and Computation***, 410: 126445, 2021. (†: corresponding author).

[24] **Jian Gao**[†], Bogang Jun, Alex 'Sandy' Pentland, Tao Zhou & César A. Hidalgo[†]. Spillovers across industries and regions in China's regional economic diversification. ***Regional Studies***, 55(7): 1311-1326, 2021. (†: corresponding author).

[23] Yian Yin[‡], **Jian Gao**[‡], Benjamin F. Jones & Dashun Wang. Coevolution of policy and science during the pandemic. ***Science***, 371(6525): 128–130, 2021. (‡: equal contribution).

[22] Bogang Jun, Aamena Alshamsi, **Jian Gao** & César A. Hidalgo. Bilateral relatedness: Knowledge diffusion and the evolution of bilateral trade. ***Journal of Evolutionary Economics***. 30: 247–277, 2020.

[21] **Jian Gao**, Yi-Cheng Zhang & Tao Zhou. Computational socioeconomics. ***Physics Reports***, 817: 1–104, 2019. (A *Review* Section of Physics Letters; Impact Factor: 30.510]

[20] **Jian Gao**[†] & Tao Zhou. Stamp out fake peer review. ***Nature***, 546(7656): 33–33, 2017. (Correspondence opinion piece; Replied by T. Welschot. *Nature*, 546(7657): 210-210, 2017).

[19] Jun Wang, **Jian Gao**[†], Jin-Hu Liu, Dan Yang & Tao Zhou. Regional economic status inference from online information flow and offline talent mobility. ***EPL (Europhysics Letters)***, 125(6): 68002, 2019. (*EPL* Highlights of 2019; †: corresponding author).

[18] Yi Cao[‡], **Jian Gao**[‡], De-Fu Lian, Zhi-Hai Rong, Jia-Tu Shi, Qing Wang, Yi-Fan Wu[‡], Hua-Xiu Yao[‡] & Tao Zhou[‡]. Orderliness predicts academic performance: Behavioral analysis on campus lifestyle. ***Journal of the Royal Society Interface***, 15: 20180210, 2018. (‡: equal contribution)

[17] **Jian Gao**[†] & Tao Zhou. Quantifying China's regional economic complexity. ***Physica A: Statistical Mechanics and its Applications***, 492: 1591, 2018. (†: corresponding author).

[16] Xiao Yang, **Jian Gao**[†], Jin-Hu Liu & Tao Zhou. Height conditions salary expectations: Evidence from large-scale data in China. ***Physica A: Statistical Mechanics and its Applications***, 501: 86–97, 2018. (†: corresponding author).

[15] **Jian Gao**[†] & Tao Zhou. Evaluating user reputation in online rating systems via an iterative group-based ranking method. ***Physica A: Statistical Mechanics and its Applications***, 473: 546–560, 2017. (†: corresponding author).

[14] Qing Wang, **Jian Gao**, Tao Zhou, Zheng Hu & Hui Tian. Critical size of ego communication networks. ***EPL (Europhysics Letters)***, 114(5): 58004, 2016.

[13] **Jian Gao**, Tao Zhou & Yanqing Hu. Bootstrap percolation on spatial networks. ***Scientific Reports***, 5: 14662, 2015.

[12] **Jian Gao**, Yu-Wei Dong, Ming-Sheng Shang, Shi-Min Cai & Tao Zhou. Group-based ranking method for online rating systems with spamming attacks. ***EPL (Europhysics Letters)***, 110(2): 28003, 2015.

[11] **Jian Gao**[†] & Tao Zhou. Big data reveal the status of economic development. *Journal of UESTC*, 45(4): 625–633, 2016. In Chinese. (†: corresponding author).

[10] Ling-Jiao Chen & **Jian Gao**[†]. A trust-based recommendation method using network diffusion processes. ***Physica A: Statistical Mechanics and its Applications***, 506: 679–691, 2018. (†: corresponding author).

[9] Ling-Jiao Chen, Zi-Ke Zhang, Jin-Hu Liu, **Jian Gao**[†] & Tao Zhou. A vertex similarity index for better personalized recommendation. ***Physica A: Statistical Mechanics and its Applications***, 466: 607–615, 2017. (†: corresponding author).

[8] Jun Wang, **Jian Gao**, Xiao Yang, Jin-Hu Liu & Tao Zhou. Online data reveal key factors on salary expectation. *Journal of UESTC*, 48(2): 307–314, 2019. In Chinese.

[7] Wei-Jie You, **Jian Gao** & Tao Zhou. Application of carrier data on precise poverty alleviation and emergency management. *Journal of UESTC (Social Sciences Edition)*, 20(6): 83–88, 2018. In Chinese.

[6] Linyan Zhang, **Jian Gao**, Xiang Hong & Tao Zhou. Human resource management based on big data. ***Big Data Research***, 1: 2015012, 2015. In Chinese.

[5] Jia Yuan, Qian-Ming Zhang, **Jian Gao**, Linyan Zhang, Xue-Song Wan, Xiao-Jun Yu & Tao Zhou. Promotion and resignation in employee networks. ***Physica A: Statistical Mechanics and its Applications***, 444: 442–447, 2016.

[4] Mei Xie, Wei Bai, Qinyuan Wu, **Jian Gao** & Tao Zhou. Impact of high-speed railway on economic development. *Journal of UESTC*, 49(6): 891–904, 2020. In Chinese.

[3] Dan-Dan Zhao, An Zeng, Ming-Sheng Shang & **Jian Gao**. Long-term effects of recommendation on the evolution of online systems. ***Chinese Physics Letters***, 30: 8901, 2013.

[2] Fangjian Guo, Jiang Su & **Jian Gao**. Finding conspirators in the network via machine learning. ***The UMAP Journal***, 33(3): 275, 2012. Outstanding paper (MCM/ICM 2011).

[1] **Jian Gao**[†] & Xi-Nan Zhang. Comprehensive scholarship evaluation model in colleges and universities. *Journal of CTBU*, 29(1): 36–41, 2012. In Chinese. (†: corresponding author).

Conference Paper

[3] Lusi Wu[‡], **Jian Gao**[‡] & Tao Zhou. The moderated curvilinear relationship between work experience diversity and salary. Proceedings of the 81st Annual Meeting of the Academy of Management (AOM), 2021. HR Division. Online Abstract. (‡: contributed equally)

[2] **Jian Gao**[†]. Maximizing the collective learning effects in regional economic development. In: *2017 14th International Computer Conference on Wavelet Active Media Technology and Information Processing (ICCWAMTIP)*, IEEE Press, 2017, pp. 337–341.

[1] Liming Pan, Lei Gao & **Jian Gao**. Link prediction in weighted networks via structural perturbations. In: *2017 14th International Computer Conference on Wavelet Active Media Technology and Information Processing*, IEEE Press, 2017, pp. 5–8.

Book Chapter

[3] **Jian Gao**[†], Tao Zhou & Quan-Hui Liu. Computational Socioeconomics: A data-driven framework for quantifying progress towards achieving the Sustainable Development Goals (SDGs). In *Future Cities, New Economy, and Shared City Prosperity Driven by Technological Innovations*, Lei Guo (Eds). United Nations Human Settlements Programme (UN-Habitat): Nairobi GPO KENYA, Ch. 1, pp. 30–43, 2020. In both English & Chinese.

[2] Yi Cao, **Jian Gao** & Tao Zhou. Orderliness of campus lifestyle predicts academic performance: A case study in Chinese university. In *Digital Phenotyping and Mobile Sensing: New Developments in Psychoinformatics*, H. Baumeister & C. Montag (Eds). Springer: Berlin, Germany, Ch. 8, pp. 125–137, 2019.

[1] **Jian Gao**, Linyan Zhang, Qian-Ming Zhang & Tao Zhou. Big data human resources: Performance analysis and promotion/resignation in employee networks. *Social Physics: Social Governance*, Yi-Jun Liu (Eds). Beijing: Science Press, Ch. 4, pp. 38–56, 2014. In Chinese.

Pre-Print / Under Review

[4] Zhongtao Yue, Yan-Li Lee, Qian-Ming Zhang, Tao Zhou & **Jian Gao**[†]. Promotional student mobility network reveals the academic hierarchy and educational inequalities, 2022. In submission to *PNAS* (Corresponding author).

[3] Mei Xie, **Jian Gao**[†] & Tao Zhou[†]. Substantial but heterogeneous impacts of high-speed rail on talent flow in China. arXiv:2112.06508, 2021. Under R&R at *Journal of Transport Geography* (Corresponding author).

[2] **Jian Gao**[‡], Yian Yin[‡], Benjamin F. Jones & Dashun Wang. Quantifying policy responses to a global emergency: Insights from the COVID-19 pandemic. arXiv:2006.13853, 2020. Part of this pre-print has been published in *Science* (2021). [Citation: 5 times.]

[1] **Jian Gao**, Bogang Jun, Alex 'Sandy' Pentland, Tao Zhou & César A. Hidalgo. Collective learning in China's regional economic development. arXiv:1703.01369, 2017. Part of this pre-print has been published in *Regional Studies* (2021). [Citation: 35 times.]

Selected Working in Progress

[10] Understanding the structure and evolution of scientific knowledge behind drugs (Lead author; with Yian Yin, Feixiong Cheng & Dashun Wang; *Representative work*).

[9] Quantifying the benefit of artificial intelligence in scientific research (Lead author; with Dashun Wang; *Representative work*).

[8] Quantitative comparison of public and private universities in the United States (Coauthor; with Yifan Qian, Yian Yin, Benjamin F. Jones, Peter Schiffer & Dashun Wang).

[7] Early science-policy interactions predict a country's effectiveness in containing the COVID-19 pandemic (Lead author; with Yian Yin, Benjamin F. Jones & Dashun Wang).

[6] The political mobilization of scientists in the United States (Coauthor; with Alexander C. Furnas, Yian Yin & Dashun Wang).

[5] Quantifying the peer influence of university dorm roommates on student academic performance (Corresponding author; with Yi Cao & Tao Zhou).

[4] Gender differences in the textual representation of resume profiles and the gender wage gap (Corresponding author; with Qian Qu, Tao Zhou, Jiancheng Lv & Quan-Hui Liu).

[3] Does being a jack of all trades pay off? The moderated curvilinear relationship between experience diversity and salary (Corresponding author; with Lusi Wu & Tao Zhou).

[2] Data-driven understanding of socioeconomic systems (Lead author; perspective article invited by the Editors of *EPL* [*Europhysics Letters*]).

[1] A review of vertex similarity in complex networks (Lead author; with Tao Zhou).

Grant Participation

[10] Key Personnel. A quantitative framework for estimating the impact of artificial intelligence across scientific disciplines. Supplemental Support for Research Trainees (SSRT) award. The Air Force Office of Scientific Research (AFOSR/RTA). $120K. PI: Dashun Wang. 2022-2023. (Proposal lead writer)

[9] Key Personnel. Developing a quantitative framework to track and assess state-level policy responses to the COVID-19 pandemic. The Peter G. Peterson Foundation Pandemic Response Policy Research Fund. $150K. PI: Dashun Wang. 2021-2023. (Proposal lead writer)

[8] Participant. Perception and prediction of socioeconomic states based on large-scale data about enterprises, human resources, etc. National Natural Science Foundation of China (No. 11975071). $86K. PI: Tao Zhou. 2020-2023. (Proposal lead writer)

[7] Participant. Information confusion in visual analysis of spatio-temporal big data. National Natural Science Foundation of China (No. 61872066). $93K. PI: Jiansu Pu. 2019-2022.

[6] Participant. Relationship between scientific and technological human resources and industrial or economic structure. China Association for Science and Technology (No. 2018ysxh1-4-5-5). $29K. PI: Tao Zhou. 2018-2019.

[5] Participant. Cultural evolution based on complex network analysis. National Natural Science Foundation of China (No. 61703074). $36K. PI: Qian-Ming Zhang. 2017-2019.

[4] Participant. Behavioral pattern analysis of information subject in social networks. National Natural Science Foundation of China (No. 61673086). $23K. PI: Shi-Min Cai. 2017-2017.

[3] Participant. Human space-time coupling behavior. National Natural Science Foundation of China (No. 61603074). $31K. PI: Zhi-Dan Zhao. 2016-2017.

[2] Participant. Performance and behavior predication of employees using big data. National Social Science Foundation of China (No. 15CGL029). $29K. PI: Jia Yuan. 2015-2019.

[1] Participant. Information recommendation in dynamic online system. National Natural Science Foundation of China (No. 61370150). $677K. PI: Ming-Sheng Shang. 2014-2017.

Academic Presentations

2021/12	Beijing Technology and Business University (Invited talk)	Beijing, China
2021/11	Chengdu University of Technology (Invited talk)	Chengdu, China
2021/09	University of Electronic Science and Technology of China (Invited talk)	Chengdu, China
2021/08	Annual Meeting of the Academy of Management (Presented by co-author)	/
2021/01	SWARMA Club: Complexity Science Express Series (Invited talk)	Beijing, China
2020/11	Northwestern University's COVID-19 Symposia Lightning Talk	Evanston, USA
2020/06	Friday@NICO Seminar (Presented together with Yian Yin)	Evanston, USA
2019/07	Complexity 2019–Complex Science Annual Meeting (Invited talk)	Shanghai, China
2019/05	CNetSci 2019–China Forum of Network Science	Dalian, China
2018/11	AI&S 2018–AI & Society Academic Salon (Invited talk)	Chengdu, China
2018/08	BDSC 2018–National Conference on Big Data & Social Computing	Shijiazhuang, China
2018/08	CCDM 2018–China Conference on Data Mining	Jinan, China
2018/01	NetSciX 2018–International School and Conference on Network Science	Hangzhou, China
2017/04	AAG 2017–Economic Geography Sessions	Boston, USA
2017/01	B4 Event–Universidad del Desarrollo	Valparaiso, Chile
2016/03	Interdisciplinary Complex Systems Science Seminar in BU	Boston, USA
2015/10	Symposium on Complexity Science in SWUST	Mianyang, China
2015/06	The Statistical Physics and Complex Systems Conference	Lanzhou, China

2015/06	Symposium of China Inter-discipline Association for Complex Economy	Yantai, China
2014/10	The 10th Chinese Conference on Complex Networks	Changsha, China
2014/07	The 2nd Academic Conference on Complexity Science	Wenzhou, China
2013/10	The 9th Chinese Conference on Complex Networks	Hangzhou, China

Selected Awards, Honors, & Scholarships

Awards

2022	**Outstanding Reviewer Award** 2021, Journal of Physics: Complexity	(Top 4)
2021	**Best Reviewer Award**, TIM Division, Academy of Management Annual Meeting	/
2020	EPL Highlights of 2019, corresponding author for *EPL* 125 (2019) 68002	/
2018	Best Poster Award in the 2018 NetSciX Conference on Network Science	(Top 6)
2014	Best Poster Award in the 2nd Conference on Complexity Science	(Top 3)
2012	**Outstanding Winner** in 2012 Interdisciplinary Contest in Modeling (ICM) *COMAP, sponsored by SIAM, NSA and INFORMS*	(0.3%)
2010	Second Prize in National Mathematical Contest in Modeling (MCM)	(5%)

Honors

2019	**Provincial Excellent Graduate Student**, *Education Department in Sichuan*	(1%)
2019	University Excellent Graduate Student, *UESTC*	(5%)
2012	University Excellent Undergraduate Student, *UESTC*	(7%)
2011	**Outstanding Student of the University**, *UESTC* *awarded by the chancellor's office, top 10 undergraduates, the university highest honor*	(0.2%)

Scholarships

2014-2019	University Education Foundation & Tang Lixin Scholarship, *UESTC*	(0.5%)
2016	**National Scholarship for Graduate Student**, *Ministry of Education*	(5%)
2016	First-class Scholarship for Graduate Student, *UESTC*	(5%)
2016-2017	CSC Scholarship, *China Scholarship Council (CSC) & Ministry of Education*	/
2012-2014	University Graduate Student Scholarship, *UESTC*	(10%)
2009-2011	National Inspiration Scholarship, *Ministry of Education*	(5%)

Peer Review & Editorial Services

◇ Web of Science Verified Peer Reviews: 190 times for 126 manuscripts
◇ Average Length of Review Reports: 840 words (according to Web of Science Publons)

Grant Reviewer

National Science Foundation (NSF), 2022

Journal Reviewer

General Audience	Nature Communications (2022–), Journal of the Royal Society Interface (2018–), Research (2021–), Royal Society Open Science (2021–), Heliyon (2019–), Patterns (2020–), Scientific Reports (2020–), PLoS ONE (2019–)
Social/Economy	Frontiers in Psychology (2020–), Frontiers in Public Health (2021–), Area Development and Policy (2019–), Marine Policy (2019–), Socio-Economic Planning Sciences (2021–), Sustainability (2021–), Healthcare (2021–), Merits (2021–), Environment and Planning A: Economy and Space (2022–), Academy of Management (AOM) Annual Meeting (2021–)
Physics/Maths	Journal of Physics: Complexity (2020–), Complexity (2020–), Entropy (2021–), International Journal of Modern Physics C (2018–), Physica Scripta (2018–), Physics Letters A (2017–), Physica A: Statistical Mechanics and its Applications (2016–), Network Science (2021–), Chinese Physics B (2021–), Chaos (2021–), PLoS Biology (2020–)

Computer/Information	Information Sciences (2020–), Knowledge-Based Systems (2017–), IEEE Transactions on Knowledge and Data Engineering (2016–), Social Network Analysis and Mining (2020–), Expert Systems With Applications (2021–), Collective Intelligence (2021–), International Journal of Automation and Computing (2020–), Journal of Computer Science and Technology (2021–), Journal of King Saud University - Computer and Information Sciences (2021–), AI & SOCIETY (2020–), IEEE Access (2019–), Computer Standards and Interface (2017–), Journal of Computational Methods in Sciences and Engineering (2017–)

Editorial Board

Guest Associate Editor, *Frontiers in Physics* (Social Physics section), 2021–2022

Guest Editor, *Frontiers in Education* (Higher Education section), 2021–2022

Teaching Experiences

Spring 2022	Teaching Assistant, Social Dynamics and Network Analysis (MORS 457) MBA course at Kellogg School of Management, Northwestern University	NU
Fall 2020	Teaching Assistant, Social Dynamics and Network Analysis (MORS 457) MBA course at Kellogg School of Management, Northwestern University	NU
Spring 2018	Invited Lecturer, Computational Socioeconomics (School of Statistics) Graduate-level course at Southwestern University of Finance and Economics	SWUFE
Fall 2013	Teaching Assistant, Calculus I (School of Mathematical Sciences) Undergraduate-level course at University of Electronic Science and Technology of China	UESTC
Fall 2012	Teaching Assistant, Mathematical Modeling (School of Mathematical Sciences) Undergraduate-level course at University of Electronic Science and Technology of China	UESTC

Student Mentoring/Co-advising

PhD Students

2020-2022	Qian Qu, Sichuan University
2019-2022	Zhongtao Yue, University of Electronic Science and Technology of China
2018-2022	Yi Cao, University of Electronic Science and Technology of China
2016-2018	Ling-Jiao Chen, University of Electronic Science and Technology of China Currently Lecturer at Hunan University of Technology, China

Master Students

2020-2021	Mei Xie, University of Electronic Science and Technology of China
2018-2019	Jun Wang, University of Electronic Science and Technology of China

Undergraduate Students

2016-2017	Xiao Yang, University of Electronic Science and Technology of China Currently PhD student at The University of Edinburgh, UK

Industry Experiences

2018-2019	Research Intern. Institution of New Economic Development (iNED)	Chengdu, China
2015-2016	Research Intern. Business Big Data (BBD) Technology Ltd.	Chengdu, China
2013-2014	Research Intern & Algorithm Engineer. Hire Big Data Ltd.	Chengdu, China

Selected Media Coverage

2021	Paper "Potentially long-lasting effects of the pandemic on scientists" (*Nature Communications*) was covered in *Science* (Careers), *Nature* (News), newspapers, and blogs:

- *Science*: The pandemic's slowing of research productivity may last years—especially for women and parents. By Jyoti Madhusoodanan. In print: "Pandemic productivity dip may linger." *Science* 374(6567), 519-519 (2021).

- *Nature*: The COVID pandemic has harmed researcher productivity – and mental health. By Dyani Lewis. In print: "Pandemic takes its toll on researcher productivity and mental health." *Nature* 599(7885), 353-353 (2021).

- *Scientific American*: A high-speed scientific hive mind emerged from the COVID pandemic. By Joseph Bak-Coleman, Carl T. Bergstrom.

- *Forbes*: The bad news, good news, bad news about COVID's impact on scientific research. By Brian Uzzi.

- *Physics World*: New non-COVID research projects plunge by a third since the start of the pandemic. By Ian Randall.

- *The Horizons Tracker*: The impact of COVID on the research community could last many years. By ADI.

- *Northwestern Now News*: Pandemic's effect on scientists may be long lasting, study finds. By Amanda Morris.

- *The Daily Northwestern*: Kellogg studies find COVID-19 will have long-term impacts on research. By Skyler Zur.

- *Northwestern Kellogg Insight*: How Has Covid-19 shaped scientists—and the future of science? By Emily Stone.

2021 Paper "Coevolution of policy and science during the pandemic" (*Science*) was covered in news and blogs:

- *The Scientist*: WHO leads in using solid science to draft COVID-19 policy: Study? By Max Kozlov.

- *Science Magazine*: Policymakers draw heavily from highly cited COVID-19 science. By SCIENCE NEWS.

- *Northwestern Kellogg Insight*: How well does COVID public policy align with science? By Sachin Waikar.

- *FROMTBOT*: Are our COVID 19 policies grounded in quality science? By Sunaina Rao.

2019 Paper "Computational socioeconomics" (*Physics Reports*) was covered in news and blogs:
- *Science Net*: From archive to computational socioeconomics. In Chinese. By Minqi Hu.
- *Sichuan Observer*: Applying big data to social science research. In Chinese. By Huan Li.
- *Swarma Club*: Computational socioeconomics provides interdisciplinary insights social and economic development. In Chinese. By Leo.

2019 Paper "Orderliness predicts academic performance: Behavioral analysis on campus lifestyle" (*Journal of the Royal Society Interface*) was covered in news and blogs:

- *Teach Wire Daily*: Does orderliness predict academic success? By Gordon Cairns.

- *China Daily*: Students with higher GPAs tend to eat breakfast more often. By Wenfang Zhang.

- *New Scientist*: China's uniform approach for students is a bad fit for other countries. By Michael Brooks.

- *Science and Technology Daily*: 'Real Hammer' to student's laziness: Study suggests regular lifestyle benefits academic development. In Chinese. By Li Sheng.

- *Chengdu Economic Daily*: Who is easier to become a scholar. In Chinese. By Zunsu Yu.

- *The Beijing News*: High-achieving students more likely to eat breakfast, study shows. In Chinese. By Zheng Ai.

- *Science Net*: Say goodbye to "slack": Regular campus lifestyle may help academic development. In Chinese. By Weijia Cheng.

2018   Paper "Height conditions salary expectations" (*Physica A*) was covered in *Merry for Money*, *Science Net Research Blog* (in Chinese), and *Sohu Blog* (in Chinese).

2017   Correspondence opinion piece "Stamp out fake peer review" (*Nature*) was replied by Springer Nature (Tamara Welschot. Springer Nature's reply on fake review. *Nature*, 546(7657): 210-210, 2017) and was covered in *UESTC News* (in Chinese).

2016   Paper "Promotion and resignation in employee networks" (*Physica A*) was covered in *Collazo & Keil Blog* and *Science Net Research Blog* (in Chinese).

Computer and Communication Skills

Computing   Python, Stata, MATLAB, R   ◇ Visualization: AI, D3, Gephi, OriginLab
Language   English (fluent), Chinese Mandarin (native)   ◇ Typesetting: LaTeX, MS Office, Markdown

References

Dashun Wang
Professor of Management & Organizations, Kellogg School of Management
Professor of Industrial Engineering & Management Sciences, McCormick School of Engineering
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Northwestern University, Evanston, IL, USA
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Benjamin F. Jones
Gordon and Llura Gund Family Professor in Entrepreneurship, Kellogg School of Management
Professor of Strategy, Kellogg School of Management
Faculty Director, Kellogg Innovation and Entrepreneurship Initiative (KIEI)
Northwestern University, Evanston, IL, USA
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Karim R. Lakhani
Dorothy & Michael Hintze Professor of Business Administration, Harvard Business School
Founder and co-director of the Laboratory for Innovation Science at Harvard (LISH)
Co-founder of the Digital, Data, and Design Institute at Harvard
Harvard University, Cambridge, MA, USA
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César A. Hidalgo
ANITI Chair Professor, Artificial and Natural Intelligence Toulouse Institute (ANITI)
Associate Member, Toulouse School of Economics, University of Toulouse, France
Honorary Professor, Alliance Manchester Business School, University of Manchester, UK
Visiting Professor, School of Engineering and Applied Sciences, Harvard University, USA
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